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Social Care Workforce Periodical

WHO CARES FOR THE FAMILY- CARERS OF ADULTS AND OLDER PEOPLE?

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About *Social Care Workforce Periodical*

The *Social Care Workforce Periodical* (SCWP) is a regular web-based publication, published by the Social Care Workforce Research Unit, King's College London. SCWP aims to provide timely and up-to-date information on the social care workforce in England. In each issue, one aspect of the workforce is investigated through the analysis of emerging quantitative workforce data to provide evidence-based information that relates specifically to this workforce in England. The first issues of *Social Care Workforce Periodical* provide in-depth analyses of the latest versions of the National Minimum Data Set in Social Care (NMDS-SC); for further details on NMDS-SC please visit <http://www.nmds-sc-online.org.uk/>. We welcome suggestions for topics to be included in future issues. This *Issue* is contributing to the Unit's study of the Carers' Workforce being undertaken for the NIHR School for Social Care Research by providing new background information on this workforce.

About the author

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Acknowledgments and disclaimer

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Executive Summary

Increasingly social care policy in most of the developing world is shifting towards cash-for-care schemes to support people in their own homes. In England the Carers' Strategy (HM Government 2008) highlights the role of informal carers and the new Coalition Government further identified direct payments as a means of supporting informal carers. Presently there is little information available about social care interventions provided for carers. Is there a specific workforce that is equipped to meet carers' needs? What are the size and characteristics of any such workforce? Where are they located and what are their skills? In this *Issue* of the *Social Care Workforce Periodical* we aim to address elements of this knowledge gap by investigating available data on the carers' workforce in England.

The current *Issue* uses the NMDS-SC individual workers' file, which covers returns from social care employers in England up to the end of June 2010. We start the analysis by exploring the proportion of providers of social care services which are identified as providing carers' support as their 'main' activity as well as that of provision for carers as part of wider services. Employers provided information on their total (aggregate) number of permanent and temporary workers in the NMDS 'provisional file'; these data are used to explore the percentage of carers' workforce among aggregate workers reported in the NMDS-SC. We then focus on investigating the characteristics of the carers' workforce as identified through the detailed 'individual workers' files of the NMDS (we focus on those providing services to carers of adults or older people).

Among the 24,301 employers who completed the NMDS-SC by end of June 2010, only 0.4 percent (n=97) indicated that their 'main' service provides carers' support. When considering those who provide services for carers of adults or older people as their main or additional service this proportion increases to 8.5 percent (n=2064) of providers. Out of the total number of workers (aggregate information on 707,623 workers) only 0.4 percent work in organisations that provide carers' support as their main service while 13.1 percent (n=92,864) work in organisations that provide carers' support services amongst their activities (any carer service). Employers then provided detailed individual information on 46,274 out of the 92,864 carers' workers; these records are the focus of the current analysis.

The analysis reveals an overlap of services to carers of adults and older people highlighting the need for a well-equipped workforce to meet the variety of carers' needs whatever their client group status. Some lack of job roles' diversity was reflected by the analysis and this may be a cause of concern or indeed congratulation and worth further investigation. For example, there are very similar proportions of workers whose job roles are related to advice, guidance and advocacy among the carers' workforce and the rest of the workforce (0.2% v. 0.1%). However, the carers' workforce contained proportionally more

community support and outreach officers than the rest of the workforce (4.9% vs. 3.5%). A large proportion of the carers' workforce is placed within organisations providing adult domiciliary care as their main services (54% vs. 22.6%).

The findings point to a higher prevalence of agency workers among the carers' workforce, particularly among the private sector when compared to the rest of the workforce. The carers' workforce was situated, on average, within employers that have considerably higher turnover and vacancy rates than others in adult social care.

The current analysis offers an initial, yet important, step in understanding the carers' workforce; however, a number of issues need further investigation. Particularly, the specific roles of the carers' workforce remain unclear, the analysis reflects that they may include some care management, but it is not clear if this includes specific support for carers to organise care for the disabled people (mainly relatives) they look support. For example, specific roles related to guidance and advocacy are very rare and not particularly high among the carers' workforce in comparison to the rest of the workforce. Another point is the apparent high level of instability within this workforce, does this relate solely to the fact that a considerable part of carers' support is provided within adult domiciliary services? Or does it relate to the nature of carers' workforce day-to-day job demands? Planned qualitative interviews as part of a carers' workforce study conducted by the Social Care Workforce Research Unit and funded by the NIHR School for Social Care Research are intended to answer these and other questions.

Background

Increasingly social care policy in most of the developing world is shifting towards cash-for-care schemes to support people in their own homes. In England the policy of personalisation is taking this forward. Sometimes the primary objective of these schemes is to provide financial resources for disabled people (of all ages) to help meet the costs of their support. In these and other instances, such schemes may benefit informal or family carers indirectly (Glendinning 2009). Using the 2001 census data, it has been estimated that around 14 percent of all adults (aged 25-59) in the UK (11% among men and 16% among women) are providing informal care for other individuals (mainly family members), excluding activities such as child care (Farfan-Porter *et al.* 2009). The high level of informal care for people with long-term care needs is not unique to the UK and is observed in other developed countries such as the United States (US) (Grabowski, Norton and Van Houtven 2010) and other OECD countries (Hussein, Manthorpe and Bakilana 2009).

In the UK, personal budgets and self-directed support may offer more flexibility to service users about the choice of person providing their care enabling them to remain in their homes for as long as possible. The majority of care provision in the UK is provided by informal carers while formal provision forms the apex of the triangle of care (Davidson 2009). It is estimated that informal care of people over the age of 65 years saves the UK public purse in excess of £60 billion per annum (www.ageuk.org.uk).

The relationship between formal and informal care provision is positioned in a continuum between substitution and complimentary care (Litwin and Attias-Donfut 2009). At one end of this continuum, the substitution model argues that the advent of formal care eventually replaces informal care (Agree *et al.* 2005) but, on the other hand, both formal and informal care can exist in a more complimentary fashion (Davey *et al.* 2005). However, both perspectives may be underpinned by 'collaboration' between the formal and informal care systems. Sometimes, informal care may retreat when formal care starts, but then, after some time, it may stabilise (Li 2005).

Informal care is a key factor influencing the extent of formal services; any reduction in informal care is likely to have substantial influence on the demand for formal care (Pickard *et al.* 2000). While informal carers provide substantial care for people with long-term care needs, this may have negative consequences on their general health (Farfan-Porter *et al.* 2009), and their labour-market participation and earnings (Heitmueller and Inglis 2007). Increasingly informal care can include a great deal of care management for the disabled adult in addition to direct 'hands-on' care (Rosenthal, Martin-Matthews and Keefe 2007). Family carers usually face considerable difficulties navigating services and funding sources; even when accessing the most basic resources (Miller, Allen and Mor 2009). Such demands are thought to be associated with isolation and

possibly negative impacts on the mental health and wellbeing of informal carers (Balducci *et al.* 2008).

Moreover, with the increasing policy shift towards cash-for-care interventions, it is likely that informal care provision will continue to form a significant part of care for older and vulnerable adults, since informal carers may take on the task of support as well as further activities of care. Within this context it is important that informal carers are supported, trained and provided with necessary information and knowledge to facilitate their caring responsibilities. Recently there has been some recognition of the roles of informal carers and research into their active involvement in information sharing, for example, has been undertaken (Pinfold *et al.* 2010).

In England the first Carers' Strategy (HM Government 2008) acknowledges the role of informal carers, highlighting a planned budget of over £1.7 billion for councils to use to support carers until March 2011. Such support is provided by the Department of Health (DH) to local authorities through annual Carers Grants as well as establishing specific information services and training programme for carers. The Carers' Strategy has recently been through a public consultation stage as part of its update (consultation closed on 20th September 2010); due to be published in December 2010. There are fears, however, that within the current economic situation carers' support will be mainly through direct payments (or cash for care) which are means tested and subject to high eligibility thresholds. The Coalition programme for Government published in May 2010, also states:

We will use direct payments to carers and better community-based provision to improve access to respite care.

(HM Government 2010)

It is not clear how this vision will affect mainstream services for carers which are situated outside direct payments, particularly those related to community-based provisions and respite care. Presently, that is little information available about the workforce involved in current services supporting carers within existing social care provisions in England. Is there a specific workforce that is equipped to meet carers' needs? What is the prevalence of such a workforce? Where are they located and what are their characteristics? In this *Issue* of the *Social Care Workforce Periodical* we aim to address this knowledge gap by investigating available data on the carers' workforce in England. We consider here members of the social care workforce who work within organisations that provide services for informal carers as the main or part of their services. Using the National Minimum Data Set for Social Care (NMDS-SC) about individual workers we examine the relative size of this workforce and draw a picture of their characteristics from the large national sample NMDS provides.

Methods

The current *Issue* mainly uses the NMDS-SC individual workers' file, end of June 2010 release, which covers returns from social care employers in England up to the end of June 2010. Employers complete two main files. The first file relates to their provision as a whole and provides aggregate information on the total number of staff employed in different job roles, overall number of leavers during the previous 12 months and other information (provisional file). Employers then provide more detailed information on all, or a sample of, their staff; this second file is called the 'individual workers' file'. The data used in this report use the individual detailed workers' files and are linked to some of the information provided in the provisional data file. The current data related to a total of 24,301 employers providing details on 499,034 individual employees. Over three quarters of NMDS-SC returns, dated June 2010, were updated during the previous 12 months. The analysis uses data extracted from the NMDS-SC individual workers' file provided by employers. This file is linked to other information available from the 'provisional' data file, such as size of organisation, overall turnover and vacancy rates in the organisation, type of main service provided and sector. It should be noted, however, that currently the NMDS-SC under-represents the statutory sector (local authorities) and over-represents the independent sector. Similarly, it under-represents 'micro' employers (mainly people who employ their own social care staff). For full discussion of these limitations please refer to *Issues 2 and 3 of SCWP* (Hussein 2009a and 2010).

By end of June 2010, employers had provided detailed information on some (or all) their workers in the NMDS 'individual workers' file. The focus of the current analysis is on individual workers because it provides detailed information on a number of personal and workplace characteristics. Given that carers' support is usually provided by organisations which offer a number of other services, we examined the profile of individual workers working in organisations providing support to carers of older people or disabled adults as part of their services. Although the NMDS-SC includes information on organisations that provide services to carers of children and young people, we are not including them as part of the current analysis. In this report we term the group of workers working in organisations providing services to carers of adults or older people as the 'carers' workforce'. The aim of the analysis is to provide detailed information on the carers' workforce as extracted from the NMDS-SC.

Of course, the current returns of the NMDS do not provide a census of the entire carers' workforce in England; however, they currently provide information on 54.5 percent of all Care Quality Commission (CQC) registered providers with an additional 10,661 non-CQC registered providers. The latter group may include organisations, which do not provide personal care, such as community care (voluntary and private), day care, some residential services such as hostels and sheltered housing, and some domiciliary care services offering various home support/help but not offering personal care. Employers provided information on all or some of their workers, in the current data release of NMDS-SC (June 2010);

employers provided individual information on 71 percent of their aggregate total workers. Using the individual workers' data we will be drawing a picture of personal, employment, and organisational characteristics of the 'carers' workforce' relative to the 'other care workforce' as extracted from the current returns of the NMDS-SC. The analysis uses a range of descriptive and bivariate analyses with suitable statistical tests.

Carers' support

Employers who completed the National Minimum Data Set for Social Care (NMDS-SC); were required to identify the 'main' service they provide out of a pre-coded list of possible services. They were then asked to indicate 'all' services they provide. Among the 24,301 employers who completed the NMDS-SC by end of June 2010, only 0.4 percent (n=97) indicated that their 'main' service is to provide carers' support. When considering those who provide services for carers of adults or older people as their main or additional service this proportion increases to 8.5 percent (n=2064) of providers.

As explained in the methods' section, providers were asked to complete information on the aggregate or total number of permanent or temporary workers within their organisations for the provisional data files. They did not provide further information on individual workers at this stage but then completed detailed information on all or some of their workers for the individual data files. Overall, employers provided detailed information on 71 percent of the total number of permanent and temporary workers. Using the aggregate data we calculated the proportion of workers who are working with providers whose 'main' services provide carers' support and then calculated the proportion of those working with providers who provide **any** services to carers of adults or older people, as presented in Figure 1.

Figure 1: Percentage of provisions who provide carers' support as main service or as part of their services and proportion of total number of workers within these organisations, NMDS-SC provisional data file, June 2010

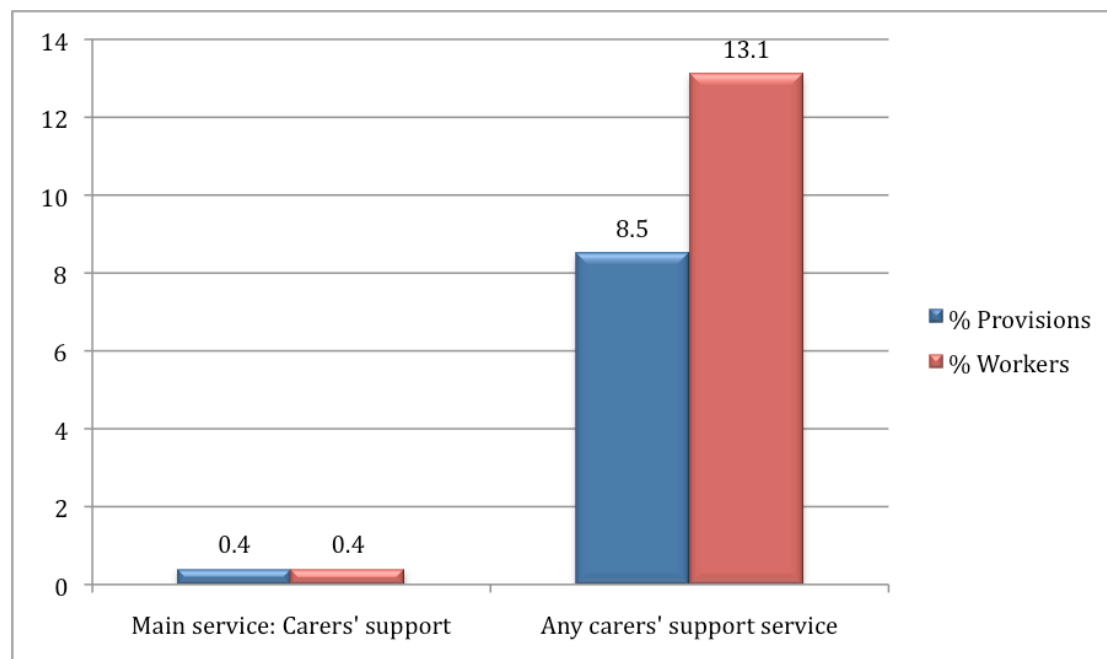


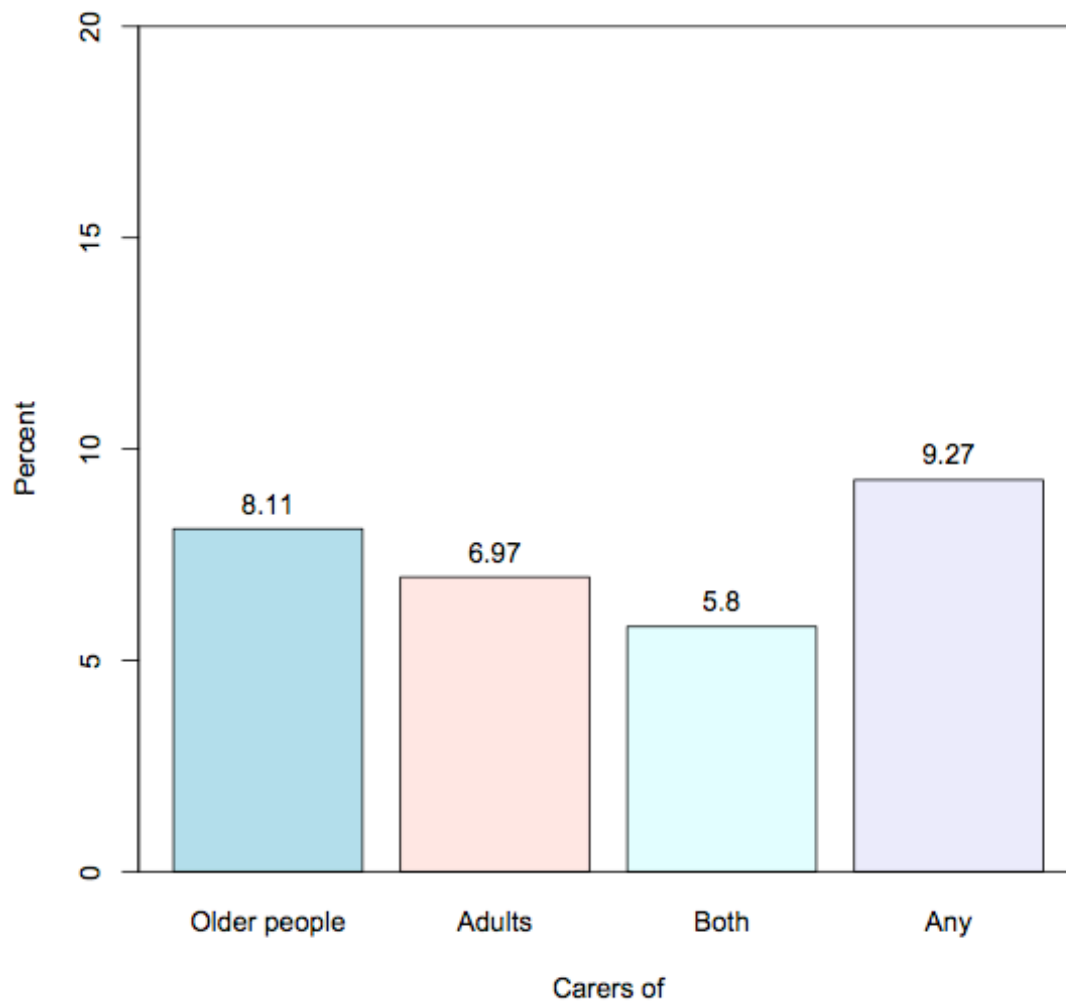
Figure 1 indicates that out of the total number of workers (aggregate information on 707,623 workers) only 0.4 percent work in organisations that provide carers' support as their main service while 13.1 percent (n=92,864) work in organisations that provide carers' support services amongst their activities (any carer service). These findings are logical given that it is rare in practice to have separate services for carers' support and such services are usually only a part of what many social care organisations provide. Rather than restrict the definition of 'carers' workforce' to people working in organisations providing mainly carers' support we include those working in organisations providing 'any' services to carers (excluding services to carers of children or young adults).

As clarified in the methods' section, employers provided detailed information on some or all of the total number of workers¹ they employ. In this case, they provided detailed information on 46,274 out of the 92,864 workers who work in organisations that provide any services for carers of adults or older people. In the rest of this *periodical* we will focus on exploring the detailed profile of such workers (46,274) and compare their characteristics to the rest of the workforce identified through the NMDS-SC individual data file. The analysis will explore differentials covering personal, job, and organisational characteristics.

Using the NMDS-SC individual records' file, Figure 2 shows that 8 percent (n=40,450) of workers with detailed characteristics work in organisations that provide services to carers of older people, 7 percent (34,782) in organisations providing services to carers of other adults with long term care needs. Figure 1 shows that these groups of workers interact, meaning that the same workers may be working with carers of adults and/or older people. Overall, 9.3 percent (46,274) of workers are working in organisations providing services to **any** carers (of adults or older people), while 5.8 percent (28,944) work in organisations providing services to both carers of adults and those of older people. We will focus on the 9.3 percent (46,274) and investigate their characteristics further. We will refer to this group as the 'carers' workforce'.

¹ Note that the current NMDS-SC does not provide a census of all social care workforce as discussed in the Methods' section

Figure 2: Percentage of the social care workforce working in provisions providing services to carers of adults and/or older people, NMDS-SC individual workers' file June 2010



Carers' workforce job characteristics

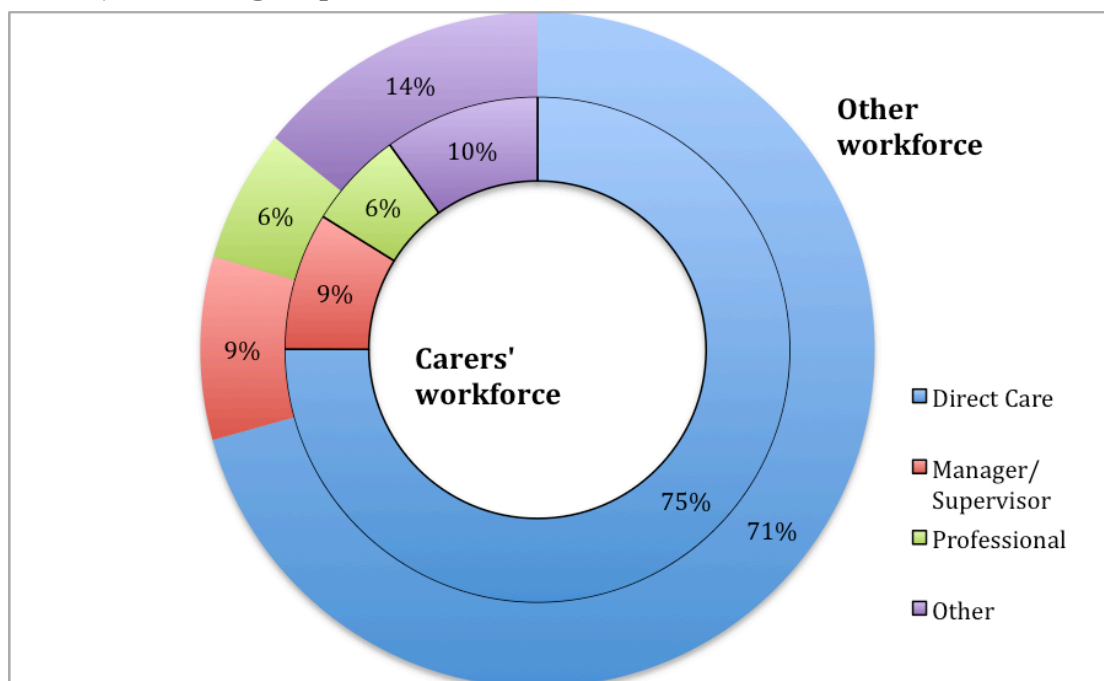
Table 1 shows that, like the rest of the social care workforce, the majority of people employed are care workers (63.6% among carers' workforce and 57.6% among the rest of the workforce), however, there are fewer senior care workers (4.9%) compared to the rest of the workforce (7.1%). Similarly, there are fewer registered nurses, standing at 2.8 percent compared with 4.4 percent, which is possibly mainly to do with the nature of the service they may be providing to carers. One of the clear differences in job roles relates to those of ancillary staff and other non-care providing roles; only 3.6 percent of the carers' workforce is comprised of ancillary staff compared to 8 percent among the rest of the workforce.

Table 1: Distribution of the carers' workforce by main job role compared to the rest of the workforce, NMDS-SC individual workers' file, June 2010

Main job role	Carers' workforce	Other workforce
Care Worker	63.6	57.6
Senior Care Worker	4.9	7.1
Community Support and Outreach officer	4.9	3.5
Administrative or office	4.3	3.3
Ancillary staff not care providing	3.6	8.0
Social Worker	2.8	1.5
Registered Nurse	2.8	4.4
Other non-care-providing roles	2.1	2.9
First Line Manager	1.9	2.0
Senior Management	1.8	1.4
Supervisor	1.4	1.6
Middle Management	1.3	0.9
Registered Manager	1.3	1.9
Managers and staff in care related jobs	1.1	1.0
Other care-providing job	0.9	1.7
Occupational Therapist	0.4	0.2
Advice Guidance and Advocacy	0.2	0.1
Employment Support	0.1	0.1
Educational Support	0.1	0.1
Allied Health Profession	0.1	0.2
Childcare Worker or Childcare assistant	0.1	0.1
Technician	0.1	0.2
Youth Offending Support	0.0	<0.1
Counsellor	0.0	<0.1
Nursery Nurse	0.0	<0.1
Teacher	0.0	0.1
Educational Assistant	0.0	0.1
Total	46,270	452,694

Differences identified in Table 1 concerning specific main job roles are reflected in the grouped job roles² as Figure 2 shows. Three quarters of the carers' workforce have direct care job roles as their main jobs compared to 71 percent among the rest of the workforce. Similar proportions, of 9 percent, perform managerial/supervisory roles as their main jobs and similar proportions of 6 percent each undertake professional roles, such as social work or occupational therapy. However, as identified earlier in this *periodical*, the carers' workforce contains proportionally fewer workers whose main jobs are non-care related (or 'other') jobs such as administrative and ancillary jobs (these differences are statistically significant with $\chi^2=664.1$ and $p<0.001$).

Figure 3: Distribution of the carers' workforce and other workforce by main job role grouped, NMDS-SC individual workers' file, June 2010



² Grouped as: 1. 'Managers/supervisors': senior management, middle management, first line manager, register manager, supervisor, managers and staff in care-related jobs; 2. 'Direct care': senior care worker, care worker, community support, employment support, advice and advocacy, educational support, technician, other jobs directly involving care; 3. 'Professional': social workers, occupational therapists, registered nurse, allied health professional, qualified teacher; 4. 'Other': administrative staff, ancillary staff, and other job roles not directly involving care.

Work patterns

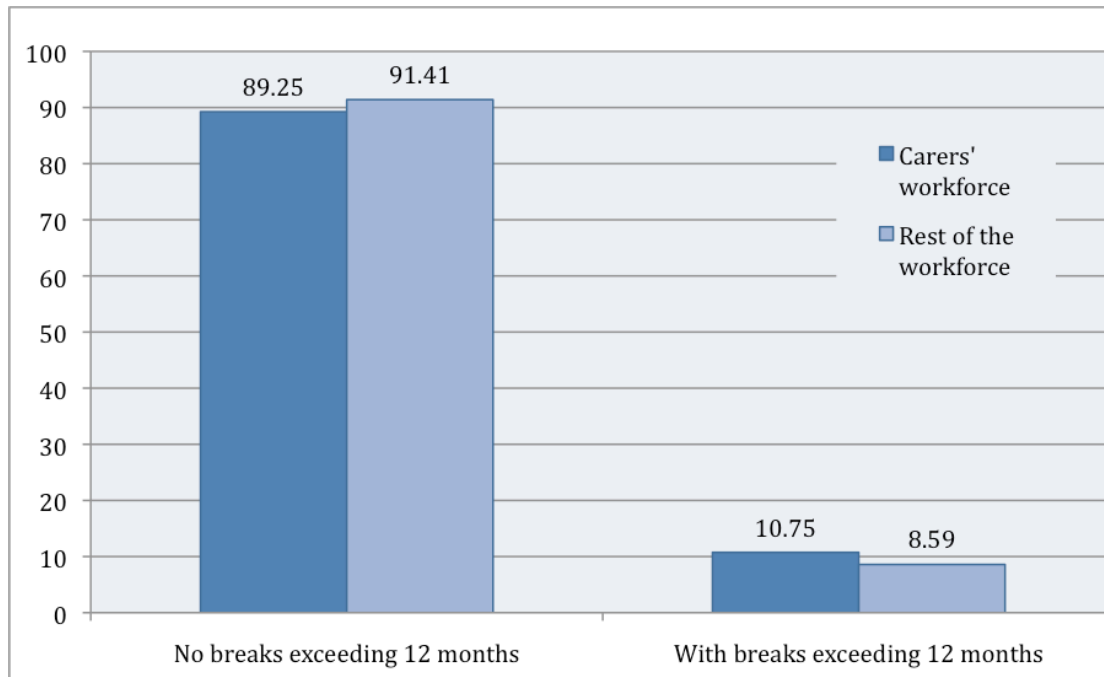
Table 2 shows that 82.5 percent of the carers' workforce is employed on permanent contracts, this is significantly ($\chi^2=3350.2$ and $p<0.001$) less than that observed among the rest of the workforce (88.6%). The percentage of agency (temporary) workers is also relatively higher among the carers' workforce in comparison to the rest of the workforce (4.8% vs. 1.2%) (slightly less on the bank or pool). Full time and part time employment patterns are roughly the same among the carers' workforce and the rest of the workforce. Around 40 percent of each group work part time and 46-49 percent work full time.

Table 2: Distribution of the carers' workforce by elements of work pattern compared to the rest of the workforce, NMDS-SC individual workers file, June 2010

Work Patterns	Carers' workforce	Other workforce	Carers' workforce	Other workforce
	N	N	%	%
Employment Status				
Permanent	28,802	325,060	82.5	88.6
Temporary	1,847	11,322	5.3	3.1
Bank or pool	1,861	20,670	5.3	5.6
Agency	1,662	4,548	4.8	1.2
Student	39	468	0.1	0.1
Volunteer	109	373	0.3	0.1
Other	585	4,350	1.7	1.2
<i>Total</i>	<i>34,905</i>	<i>366,791</i>	<i>100.0</i>	<i>100.0</i>
Full or part time				
Full-time	15,122	167,381	46.0	48.7
Part-time	13,440	134,345	40.9	39.1
Neither of these	4,297	41,890	13.1	12.2
<i>Total</i>	<i>32,859</i>	<i>343,616</i>	<i>100.0</i>	<i>100.0</i>

When examining data about continuity of work, Figure 4 shows that the percentage of workers with no breaks exceeding 12 months is very similar for the carers' workforce and the rest of the workforce, standing at around 90 percent; these variations were not statistically different. The relationship between being an agency worker and sector of work among the carers' workforce in comparison to the rest of the workforce is explored further later in this *Issue*.

Figure 4: Percentage of carers' workforce with breaks exceeding 12 months compared to the rest of the workforce, NMDS-SC individual workers' file, June 2010



Carers' workforce personal profile

Age, gender, ethnicity and reported disability

Table 3 shows that the average age of the carers' workforce is almost identical to that of 'other'³ workers, however, the carers' workforce contains slightly, but significantly, a higher proportion of women ($\chi^2=200.8$, $p<0.001$). The carers' workforce also has a slightly (but significantly) different ethnic profile from that of the rest of the workforce ($\chi^2=239.7$, $p<0.001$). The latter are reflected in slightly higher proportions of White and Black workers but smaller proportions of Asian workers. Lower proportions of Asian workers may be related to the lower prevalence of registered nurses among the carers' workforce as observed earlier in this *Issue*. Table 3 also shows that there are proportionally less workers with reported disability among the carers' workforce when compared to the rest of the workforce (1.8% vs. 2.3%; $\chi^2=33.0$, $p<0.001$).

Table 3: Distribution of carers' workforce by personal characteristics compared to that of other workforce, NMDS-SC individual workers' file, June 2010

Personal Characteristics		Carers' workforce	Other workforce
Age	Mean	42.5	42.6
	SD	12.9	13.1
Gender	Men	14.2	16.9
	Women	85.8	83.1
	Valid N ⁴	39,595	398,235
Ethnicity	White	83.2	82.0
	Mixed	1.1	1.6
	Asian or Asian British	4.5	5.6
	Black or Black British	9.2	8.3
	Other groups	2.1	2.5
	Valid N	32,056	326,740
Disability	None	98.3	97.8
	Any	1.8	2.3
	Valid N	32,176	326,091

³ Care workers identified through the NMDS-SC individual workers' files to be working in organisations that do not provide services to carers of adults or older people

⁴ Missing values varied for different data item; valid N indicates base number of calculations after excluding missing values

Qualifications held and being undertaken

Employers provide information on the highest qualification level each worker holds and about those who are working towards qualifications, and these are specified. However, this information contains a large numbers of missing values. For this reason, among others, Skills for Care introduced further questions specifically asking whether an individual worker has 'no qualification' or is not working towards any qualification. These data items were only introduced during 2010 and were completed by a relatively small number of employers, so they are used as indicative here. Table 4 shows that employers indicated that around 11 percent of the carers' workforce does not hold any qualifications and 10 percent are not working toward any qualifications. These proportions are very similar to that among the rest of the workforce and are not significantly different ($\chi^2 = 3.82$ and 0.25 ; $p = 0.06$ and 0.61 respectively).

Table 4: Statistics on qualifications held or worked towards among the carers' workforce compared to other workforce, NMDS-SC individual workers' file, June 2010

Qualifications' information		Carers' workforce	Other workforce
No qualifications held‡		10.6	9.1
<i>Valid N</i>		1,638	10,266
No qualifications worked toward‡		9.5	9.1
<i>Valid N</i>		1,638	10,266
Highest qualification level			
Entry/1		2.1	0.9
Level 2/2+		46.0	38.8
Level 3/3+		22.7	29.4
Level 4/4+		16.8	12.9
Other relevant social care qualification		12.4	18.1
<i>Valid N</i>		12,738	135,988
Highest qualification worked towards			
Entry/level 1		0.2	1.5
Level 2/2+		56.5	42.7
Level 3/3+		26.3	32.4
Level 4/4+		9.4	9.1
Other relevant social care qualification		7.6	14.4
<i>Valid N</i>		3,380	41,118

‡Based on recent returns to NMDS-SC covering information on 11,904 workers

In relation to highest qualification level, proportionally (and significantly) more workers in the carers' workforce hold NVQ level 2/2+ qualifications and level 4/4+ (46% vs. 38.8% and 16.8% vs. 12.9% respectively) (NVQ is being replaced by a new Qualifications and Credit Framework (QCF) system). On the other hand, relatively less of the carers' workforce holds level 3/3+ qualifications (22.7% vs. 29.4%). A similar concentration around level 2/2+ qualifications is observed in terms of qualifications being worked towards, where 56.5 percent of the carers'

workforce are working towards level 2/2+ compared to 42.7 percent among the rest of the workforce. It is also noticeable that relatively less of the carers' workforce is working towards 'other' relevant social care qualifications, when compared to the rest of the care workforce (7.6% vs. 14.4%). Employers indicated that nearly three quarters of the carers' workforce (74%) have completed an induction period; this figure is significantly higher than the 68.6 percent observed among the rest of the workforce ($\chi^2= 302.9$; $p<0.001$).

Nationality and country of birth

A recent addition to the data collected for the NMDS is nationality and country of birth of workers. In the NMDS-SC June 2010, employers provided such information on 89,437 individual workers (of which 8,492 are identified as being part of the carers' workforce). Using these initial returns, Figure 4 shows that the carers' workforce appear to contain proportionally fewer overseas (or non-British) workers, with 14.4 percent identified to be non-British in comparison to 17.5 percent among the rest of the workforce, these proportions are significantly different ($\chi^2= 53.3$; $p<0.001$).

Figure 5: Proportion of non-British workers in the carers' workforce and their distribution by nationality compared to the rest of the workforce, NMDS-SC individual workers file, June 2010⁵.

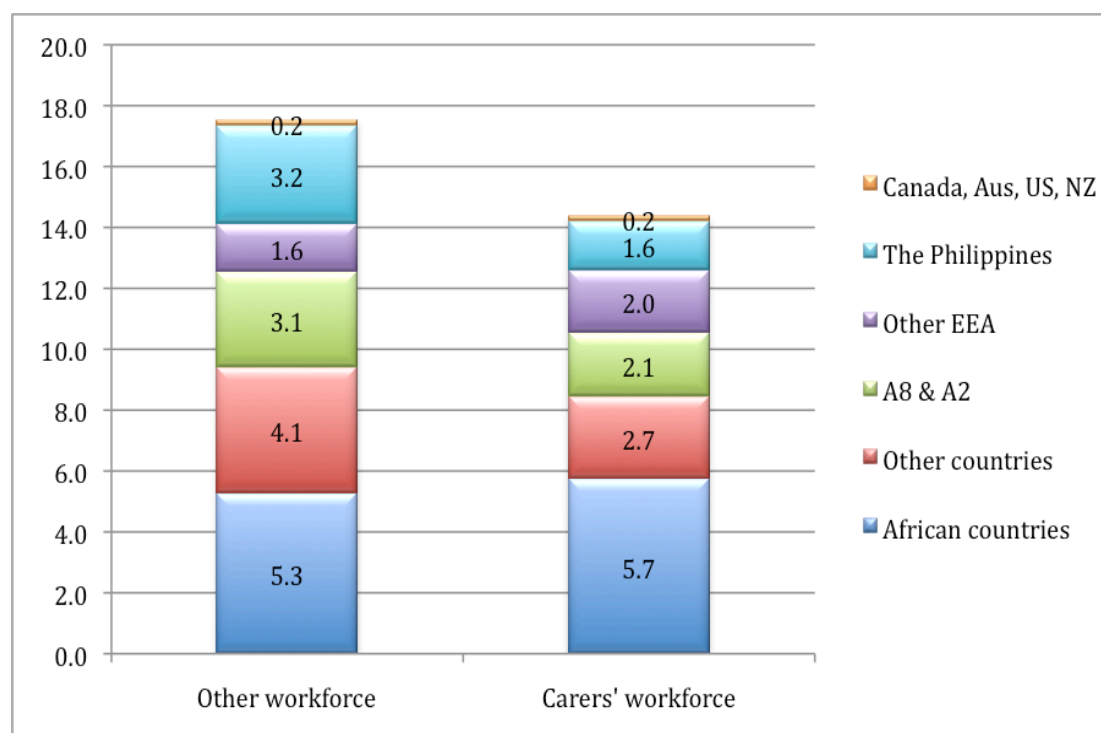


Figure 4 shows that the overall representation of non-British workers in the carers' workforce is lower than that among the rest of the social care workforce

⁵ Based on recent returns to NMDS-SC during 2010 (information available for 89,437 individual workers)

represented in the recent returns of the NMDS-SC. When grouping migrant workers by nationality, Figure 5 shows that the majority of non-British workers are from African countries (5.7% of carers' workforce and 5.3% of the rest of the workforce). The main African countries include Zimbabwe (1.5% of the carers' workforce and 1.4 of the rest of the workforce) and Nigeria (1.4% and 1.3% respectively). These proportions were followed by workers from the A8 and A2 countries⁶ (2.7% among the carers' workforce and 4.1% among the rest of the workforce); particularly from Poland (1.2% and 1.9% respectively). However, the most significant single nationality among non-British workers is Filipino, and 1.6 percent of carers' workforce are from the Philippines, which is still only nearly half the proportion of rest of the workforce (3.2%). This is likely to be because many workers from the Philippines are employed in care homes as care assistants and senior care workers or nurses (Hussein, Stevens and Manthorpe 2010).

Source of recruitment

Employers completing the NMDS-SC provided information on the source of recruitment for 37 percent of all detailed individual records (n=186,788). Table 5 indicates that the carers' workforce appears to attract fewer people who were not previously employed (2.5% vs. 4%) or from abroad (1.1% vs. 3.1%) when compared to the rest of the workforce. This may be directly linked to the type of job roles performed by the carers' workforce when compared to the rest of the workforce as discussed earlier in this *periodical*. For example, in relation to recruiting from abroad, the carers' workforce in social care contains proportionally fewer nurses with an estimated larger proportion than average of non-British workers among these nurses. Most nurses in social care work are employed in care home settings.

Furthermore, using data about nationality reported by providers to the NMDS on relatively small number of workers (89,437); non-British workers form around 43 percent of nurses⁷ compared to only 17 percent overall⁸. This is also consistent with the earlier finding that the carers' workforce contains significantly fewer non-British workers than the rest of the workforce. Possible reasons for the lower proportion of workers who were not previously working are not straightforward, however, this may be linked to the lower proportion of ancillary staff among the carers' workforce in comparison to the rest of the workforce (3.6% vs. 8%) who may have been more likely to be unemployed or school leavers.

⁶ A8: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia and A2: Romania and Bulgaria

⁷ Based on 3,387 registered nurses with information on nationality obtained from recent returns to the NMDS-SC

⁸ Detailed distributions are not presented here, migrant care workforce will be explored in a forthcoming issue of this *periodical*

Table 5: Distribution of the carers' workforce by source of recruitment compared to the rest of the workforce, NMDS-SC individual workers' file, June 2010

Source of recruitment	Carers' workforce	Other workforce	Carers' workforce	Other workforce
	N	N	%	%
Adult care sector: LA	2,562	12,805	13.8	7.6
Adult care sector: independent ⁹	5,808	59,434	31.3	35.3
Children's sector: LA	203	1,794	1.1	1.1
Children's sector: independent	211	2,571	1.1	1.5
Health sector	1,232	10,563	6.6	6.3
Retail sector	741	7,031	4.0	4.2
Other sector	1,907	16,123	10.3	9.6
Internal promotion	837	6,120	4.5	3.6
From abroad	205	5,225	1.1	3.1
Not previously employed	473	6,723	2.6	4.0
Returner	280	2,876	1.5	1.7
Agency	712	4,114	3.8	2.5
Student work experience	109	1,981	0.6	1.2
Volunteering	200	781	1.1	0.5
Other sources	3,097	30,070	16.7	17.9
<i>Total</i>	<i>18,577</i>	<i>168,211</i>	<i>100.0</i>	<i>100.0</i>

⁹ Private and voluntary sectors

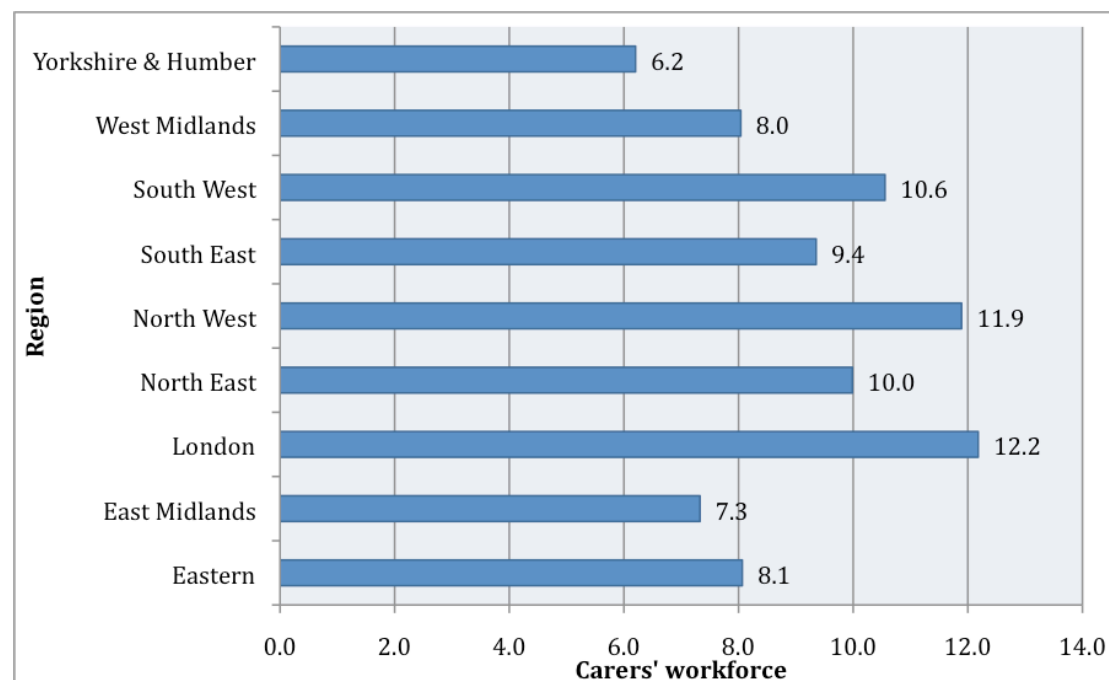
Where the carers' workforce works

In this section we explore the characteristics of carers' workforce workplace, including regional variations, in their prevalence, sector, establishment types and main services provided.

Region

Based on the NMDS-SC returns for individual social care workers, Figure 5 shows that the carers' workforce is proportionally largest in London at 12.2 percent and the North West at 11.9 percent while it is lowest in the Yorkshire and Humberside region at 6.2 percent and East Midlands at 7.3 percent. These differences are significantly different ($\chi^2=2141.1$; $p<0.001$), however, it should be noted that the current NMDS regional representations are variable.

Figure 6: Percentage of carers' workforce by region, NMDS-SC individual workers' file, June 2010

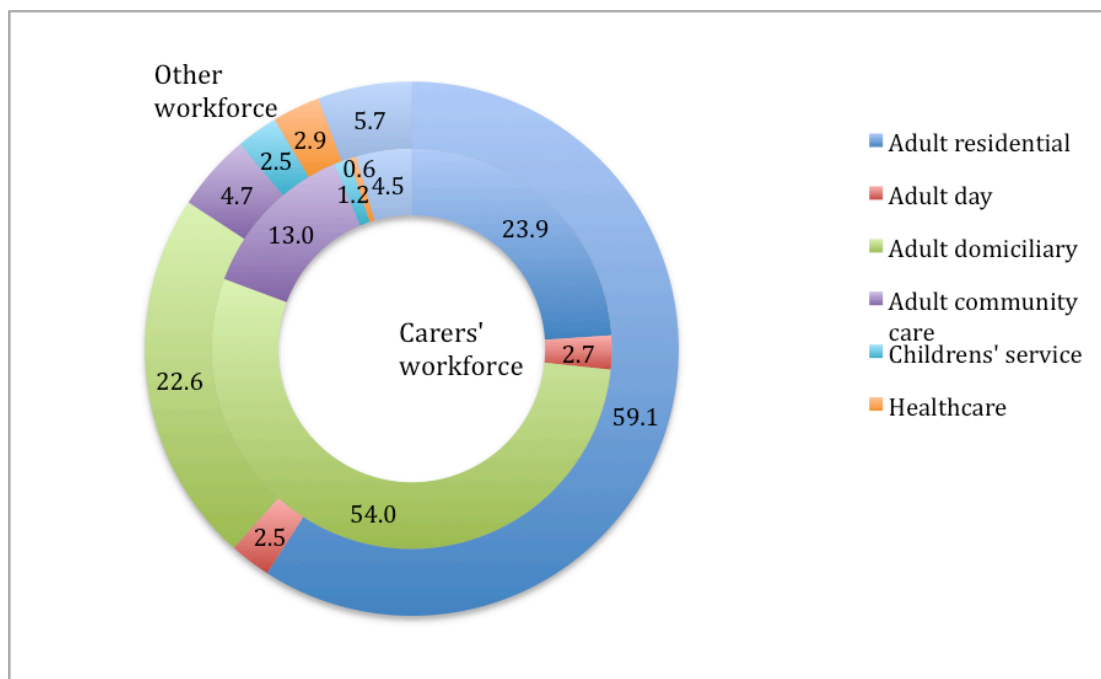


Main service provided

Table 6 shows the distribution of the carers' workforce by the main service provided by their workplace compared to the rest of the workforce; Figure 7 presents services by group. It shows that the majority of the carers' workforce (54%) is situated within organisations whose main services are adult domiciliary care, this is in contrast to the rest of the workforce where the majority work in organisations whose main focus is care home provision (adult residential)

(59%). Proportionally more of the carers' workers are located in adult community care services compared to the rest of the workforce (13% vs. 4.7%).

Figure 7: Distribution of carers' workforce by main type of service provided by their organisations compared to the rest of the workforce, NMDS-SC individual workers' file, June 2010



In terms of the detail of the main service provided, Table 6 shows that over half of the carers' workforce is employed in organisations that are engaged in domiciliary care or home care services in comparison to only 20.5 percent of the rest of the workforce. After that, one fifth of the carers' workforce works in organisations mainly care homes, with or without nursing provision. A significant minority of the carers' workforce (4.7%) works in organisations providing social work and care management services, consistent with the role of local authority adult services departments in providing carers' assessments and in supporting carers as part of care management. The distribution indicates that less than three percent of the carers' workforce works in day care services and only around two percent in organisations that provide mainly carers' support (such as carers' centres).

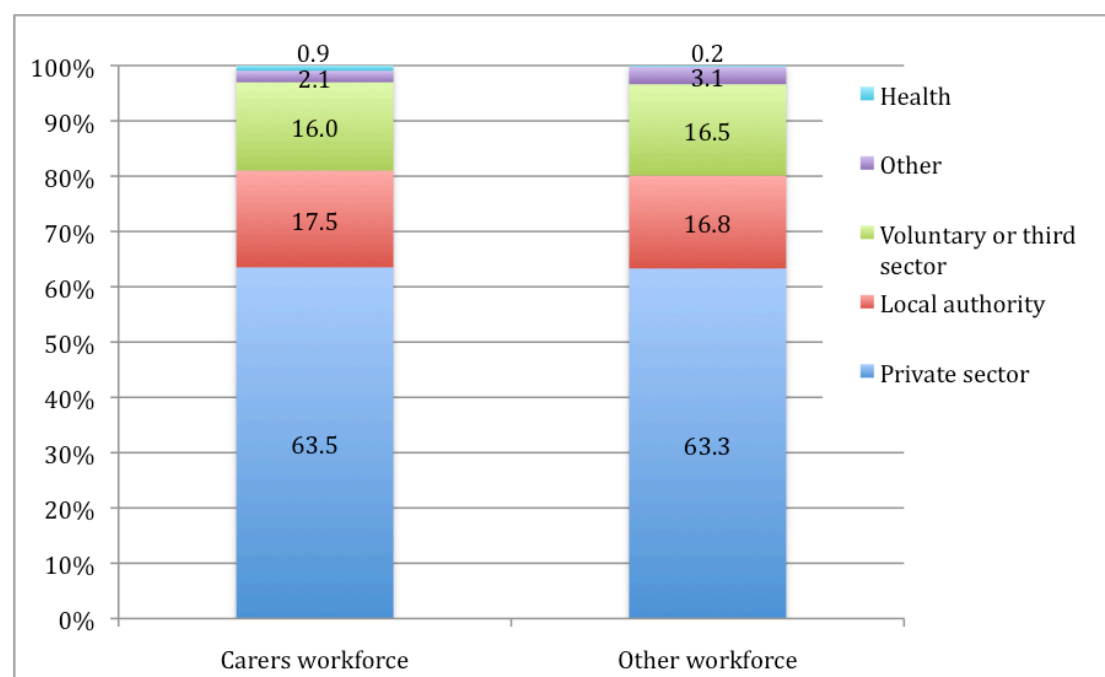
Table 6: Distribution of the carers' workforce by detailed 'main' service provided by their organisations, NMDS-SC individual workers' file, June 2010

Main service provided by the organisation	Carers' workforce	Other workforce	Carers' workforce	Other workforce
	N	N	%	%
Domiciliary care or home care	24,472	92,669	52.9	20.5
Care home without nursing provision	4,660	136,162	10.1	30.1
Care home with nursing provision	4,257	111,463	9.2	24.6
Social work and care management	2,187	66,36	4.7	1.5
Any other Services	2,073	25,751	4.5	5.7
Other adult residential care service	1,778	14,887	3.8	3.3
Day care and day services	1,200	9,817	2.6	2.2
Information and advice services	998	715	2.2	0.2
Carers support	975	525	2.1	0.1
Short breaks or respite care	654	1,320	1.4	0.3
Other adult community care service	522	4,936	1.1	1.1
Other adult domiciliary care service	384	7,267	0.8	1.6
Adult placement home	348	2,759	0.8	0.6
Adult placement service	326	851	0.7	0.2
Community support and outreach	319	6,383	0.7	1.4
Child protection	287	314	0.6	0.1
Independent hospice	142	29	0.3	0.0
Family support	128	394	0.3	0.1
Domestic services and home help	106	984	0.2	0.2
Disability adaptations	69	522	0.2	0.1
Other adult day care services	65	1,515	0.1	0.3
Any children's domiciliary care	55	527	0.1	0.1
Social Care NHS Trust	55	64	0.1	0.0
Other independent healthcare setting	36	11,835	0.1	2.6
Sheltered housing	33	2,383	0.1	0.5
Home nursing care	27	1347	0.1	0.3
Mental Health NHS Trust	28	364	0.1	0.1
Other children's day care services	24	61	0.1	0.0
Occupational or employment services	20	420	<0.1	0.1
Sessional day care	15	51	<0.1	<0.1
NHS Primary Care Trust	15	54	<0.1	<0.1
Other children's community care	11	328	<0.1	0.1
Fostering service or agency	5	766	<0.1	0.2
Meals on wheels	0	134	0.0	0.0
Care home or hostel	0	3,231	0.0	0.7
Family centre (residential)	0	311	0.0	0.1
Residential school	0	2,533	0.0	0.6
Other children's residential care	0	1,238	0.0	0.3
Full day care - e.g. day nursery	0	16	0.0	<0.1
Family centre	0	226	0.0	0.1
Mental health	0	156	0.0	<0.1
Other NHS Trust	0	70	0.0	<0.1
Any other part of NHS Hospital	0	8	0.0	<0.1
Any other part of the NHS	0	76	0.0	<0.1
Independent hospital	0	654	0.0	0.1
Independent out-patient service	0	5	0.0	<0.1
<i>Total</i>	<i>46,274</i>	<i>452,757</i>	<i>100.0</i>	<i>100.0</i>

Sector

Figure 8 shows that, as with the rest of the social care workforce, the majority of the carers' workforce is employed by the private sector (63.5% vs. 63.3%). This was followed by the voluntary or third sector (around 16%). Further, 17.5 percent of the carers' workforce and 16.8 percent of the rest of the workforce work in the statutory sector; these differences are not statistically significant.

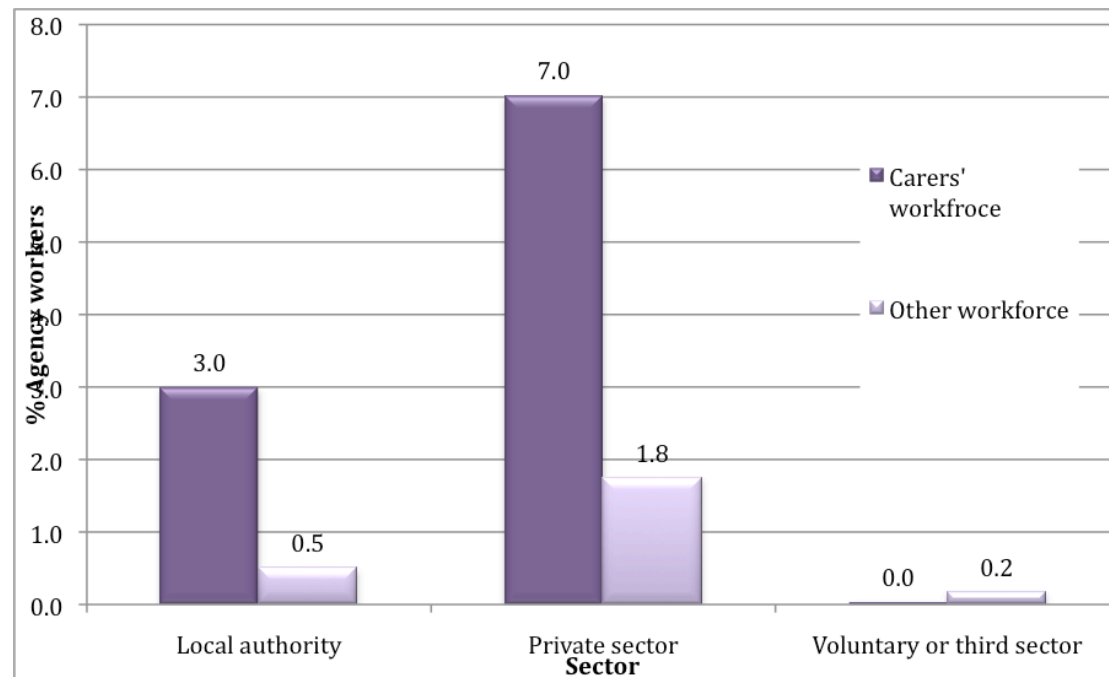
Figure 8: Distribution of the carers' workforce by sector of the organisations they work compared to the rest of the workforce, NMDS-SC individual workers' file, June 2010



Agency workers and sector

As we observed earlier, the percentage of agency (here meaning temporary) workers within the carers' workforce is significantly higher than that observed for the rest of the workforce (4.8% vs. 1.2%). We explore here the relationship between agency workers and sector of work within the carers' workforce and the rest of the workforce. Figure 9 indicates that the prevalence of agency workers is considerably higher among the carers' workforce within all sectors except for the voluntary sector. The difference is greatest within private sector organisations where the proportion of agency workers is a considerable 8 percent of the carers' workforce. Such observation is correlated with the fact that nearly half of the carers' workforce works within organisations with domiciliary services as their main service (see Table 6 and Figure 7).

Figure 9: Percentage of agency workers of the carers' workforce compared to the rest of the workforce by sector, NMDS-SC individual workers' file, June 2010



Establishment size

Figure 10 shows the distribution of the carers' workforce according to the size of the establishment¹⁰ they work in compared to the rest of the workforce. Using a mosaic plot¹¹ presentation of the distribution of the carers' workforce (compared to the rest of the workforce) by establishment size of the organisation they work, Figure 10 clearly indicates that carers' workers are over represented in medium sized employers (45.7% vs. 33.1%) and less represented among small-size employers (37.2% vs. 46.1%).

¹⁰ Grouped as 'micro' employers = less than 10 staff members, 'small' = 10-49 staff members, 'medium' = 50-199 and 'large' = 200 or more staff members.

¹¹ The mosaic display shows the frequencies in the 2-way contingency of establishment size and whether belong to the carers' workforce or not by nested rectangular regions whose area is proportional to the frequency in a cell or marginal sub-table. The mosaic plot starts as a square with length one. The square is divided first into horizontal bars whose widths are proportional to the probabilities associated with the first categorical variable. Then each bar is split vertically into bars that are proportional to the conditional probabilities of the second categorical variable (Hartigan & Kleiner, 1984; Emerson, 1988).

Figure 10: Mosaic plot of the distribution of carers' workforce by establishment size compared with the rest of the workforce, NMDS-SC individual workers' file, June 2010



Stability of workers within carers' workforce organisations

Linking individual workers' data files to their provisional overall data covering the total number of employers, vacancies and number of staff who ceased working during the previous 12 months, we were able to calculate two workforce stability indicators: 1) the mean turnover rate; and 2) the mean vacancy rate for organisations and compare these means for the carers' workforce with the rest of the workforce. Table 7 presents these statistics. One very interesting finding shown in this Table is that the carers' workforce is employed in organisations with a considerably higher mean turnover rate of 40.16 percent compared to only 18.58 percent for the rest of the workforce. *Issue 1* of this periodical revealed that turnover rate is significantly associated with sector and type of work within social care (Hussein 2009b), with particularly high turnover rates in the private sector and within domiciliary services. Although the proportion of carers' workers within the private sector is very similar to that of the rest of the workforce at around 63 percent, the percentage of the former group within organisations mainly providing domiciliary services is significantly higher. This explains the considerably higher turnover rates

observed among organisations where the carers' workforce is situated. Table 7 also shows that the standard deviation of mean turnover rates is considerably higher among the carers' workforce, indicating a variability of individual organisational turnover rates than that observed among the rest of the workforce.

In terms of the mean vacancy rate, the mean vacancy rates of organisations where carers' workforce are employed are slightly higher at 3.94 percent than that observed among the rest of the workforce (2.39%). Again the standard deviation is higher for the carers' workforce group but the difference is not as wide as that observed for the mean turnover rate. The statistics presented in Table 7 imply that the carers' workforce is on average situated within organisations which are less stable in terms of staff turnover than the rest of the sector.

Table 7: Stability workforce indicators for organisations where carers' workforce are situated compared with the rest of the workforce, NMDS-SC individual workers' files linked to provisional files, June 2010

Stability indicators		Carers' workforce	Other workforce
Turnover rate	Mean	40.16	18.58
	Standard deviation	245.70	64.28
	<i>Valid N</i>	42,418	396,623
Vacancy rate	Mean	3.94	2.39
	Standard deviation	10.25	6.35
	<i>Valid N</i>	42,418	396,623

Discussion

The analysis presented in this *Issue* has adopted a broad definition of the carers' workforce, not necessarily reflecting the entire carers' workforce, but reflecting the broader workforce, which may provide services to carers of adults and older people. It was necessary to adopt this provisional definition when using the current data source (NMDS) as the 'main' services identified as carers' support are very few proportionally (only 0.4%). It is likely that carers who receive services from self-declared carers' services will be also in contact with the staff working in services directly related to the people they care for, particularly domiciliary services as highlighted from the findings.

It is well documented that population ageing combined with a number of socio-demographic factors has dramatically increased the social and economic cost of social care. Across the developed world there is some convergence in how the care market is organised: most developed countries are moving towards home care, private provision and cash transfers (Simonazzi 2008). Within this context the duties of informal carers are highlighted in policy terms since this is a workforce that if working in family care is usually denied to the formal labour market. Informal carers are involved in 'hands on' care as well as 'managerial care'; some arguing that the latter type of care orchestration generates more stress among informal carers particularly women carers and interferes with employment among men as well as women (Rosenthal, Martin-Matthews and Keefe 2007).

Using this broad definition, the analysis clearly shows that a minority of social care provision specifically provides carers' support and most of this is situated within other services. The overlap of carers' support for carers of adults with long term care and older people was evident and this calls for a workforce that is knowledgeable and skilled to support carers who may be encountering a variety of issues in relation to physical, learning and mental disabilities as well as age related conditions such as dementia, stroke and Parkinson's disease, for example. The analysis observed that there are very similar proportions of workers whose job roles are related to advice, guidance and advocacy among the carers' and the rest of the workforce (0.2% v. 0.1%). At the same time, the carers' workforce contains proportionally more community support and outreach staff than the rest of the workforce (4.9% vs. 3.5%). One may expect that carers' support roles may not be easily identifiable through the pre-coded list provided by NMDS-SC and this may be worth investigating.

Observations related to specific job roles may, to some extent, be reflected in the analysis of the main service provided by organisations where carers' workforce are situated. A considerably large proportion of the carers' workforce is placed within organisations providing adult domiciliary care as their main services (54% vs. 22.6%). In other words, home care staff provides much support to carers as well as people with disabilities of an age. The analysis also indicates that relatively more organisations supporting carers offer social work and care management as their main services, perhaps reflecting the needs to sustain

carers in terms of managing and orchestrating care for adults and older people with long term care needs.

This current analysis of people working in social care services (mainly in registered settings) shows that they may be more likely to be qualified; at the very least significantly more have completed their induction than other staff. This is not to say that this is a matter for congratulation; it reveals the very low levels of training among social care workers overall and the lack of evidence that NVQ target levels have been met despite their general support and encouragement (Gospel 2009).

Possibly unexpected in this analysis and deserving of further exploration are three findings. First, regional variations in relation to the prevalence of the carers' workforce indicate a possible lack of carers' services particularly in regions such as the Yorkshire and Humber where the carers workforce is identified to be only 6.2 percent in comparison to the 12 percent observed in London. However, some of these variations may relate to the current regional coverage of the NMDS and needs further investigation.

Second, people supporting carers are slightly more likely to be temporary or agency workers, this again may reflect the fact that they are mainly employed as home care workers where work may have peaks and troughs of demand. But the percentage of agency carers' workers is considerably higher than that among the rest of the workers in the private sector (7% vs. 1.8%). Thirdly, the stability of the overall workforce within organisations where the carers' workforce is situated is much lower than that observed for the rest of the workforce, particularly in relation to turnover rates. The latter two points are very much linked and will require further investigation.

This *Issue* provided a first analysis of the carers' workforce characteristics as reflected by the NMDS-SC individual records. It is not clear from the identified job roles that there are specific roles to meet carers' needs; however, there are some indications that 'care management' is an identified need as reflected in the relatively higher proportions of main services as 'social work and care management' among the carers' workforce in comparison to the rest of the workforce. Yet it is difficult to ascertain this with the NMDS-SC data used for the analysis.

The current analysis offers an initial, yet important, step in understanding the carers' workforce; however, a number of features are important to investigate further. Particularly, specific roles of the carers' workforce remain unclear, the analysis reflects that they may include some care management, but it is not clear if this includes specific support for carers to organise care for the people they look after and to meet carers' own needs for support. For example, specific roles related to guidance and advocacy appear to be rare and not particularly higher among the carers' workforce in comparison to the rest of the workforce. Another point is the apparent high level of instability within this workforce, does this relate solely to the fact that a considerable part of carers' support is provided within adult domiciliary services? Or does it relate to the nature of carers'

workforce day-to-day job demands? Planned qualitative interviews as part of a carers' workforce study conducted by the Social Care Workforce Research Unit and funded by the NIHR School for Social Care Research are intended to answer these and other questions.

References

- Agree, E. M., Freedman, V. A., Cornman, J. C., Wolf, D. A. and Marcotte, J. E. (2005) Reconsidering substitution in long-term care: when does assistive technology take the place of personal care ? *Journal of Gerontology: Social Sciences*, 60, 5, S272–80.
- Balducci, C., Mnich, E., McKee, K., Lamura, G., Beckmann, A., Krevers, B., Wojszel, Z., Nolan, M., Prouskas, C., Bien, B. and Öberg, B. (2008) Negative impact and positive value in caregiving: validation of the COPE index in a six-country sample of carers. *The Gerontologist*. 48(3): 276-286.
- Davey, A., Femia, E. E., Zarit, S. H., Shea, D. G., Sundstrom, G., Berg, S., Smyer, M. A. and Savla, J. (2005) Life on the edge: patterns of formal and informal help to older adults in the United States and Sweden. *Journal of Gerontology: Social Sciences*, 60, 5, S281–8.
- Davidson, K. (2009) Statutory and informal care partnership policies: a United Kingdom perspective. *Health and Ageing*, Geneva Association Information Newsletter, 21:15-18.
- Emerson, J. W. (1998). Mosaic displays in S-PLUS: A general implementation and a case study. *Statistical Computing and Graphics Newsletter (ASA)* 9(1): 17-23.
- Farfan-Portet, M., Popham, F., Mitchell, R., Swine, C. and Lorant, V. (2009) Caring, employment and health among adults of working age: evidence from Britain and Belgium. *European Journal of Public Health*, 20(1):52-57.
- Glendinning, C. (2009) Cash for Care: Implications for Carers. Editorial, *Health and Ageing*, Geneva Association Information Newsletter, 21:3-5.
- Gospel, H. (2009) Workforce Training and Development in the Context of the Statutory Framework for the Social Care Sector: A Replication Study, London, King's College London.
<http://www.kcl.ac.uk/schools/sspp/interdisciplinary/scwru/research/projects/training.html>
- Grabowski, D., Norton, E. and Van Houtven, C. (forthcoming) Informal Care. *Journal of Health Economics*.
- Hartigan, J. A. and Kleiner, B. (1984). A mosaic of television ratings. *The American Statistician* 38: 32-35.
- Heitmueller, A. and Inglis, K. (2007) The earnings of informal carers: Wage differentials and opportunity costs. *Journal of Health Economics*, 26:821-841.
- HM Government (2008) *Carers at the heart of 21st-century families and communities*, Department of Health, Crown Publication: London.
- HM Government (2010) *The Coalition: Our programme for government*. Cabinet Office, Crown Publication: London.
- Hussein, S. (2009a) Social care workforce profile: Age, gender and ethnicity. *Social Care Workforce Periodical*, Issue 2- September 2009; web published

<http://www.kcl.ac.uk/schools/sspp/interdisciplinary/scwru/pubs/periodical/issue2.html>

Hussein, S. (2009b) The size, roles and stability of the social care workforce in England. *Social Care Workforce Periodical*, Issue 1- August 2009; web published <http://www.kcl.ac.uk/schools/sspp/interdisciplinary/scwru/pubs/periodical/issue1.html>

Hussein, S. (2010) The role of young workers (18-25) in the English care sector. *Social Care Workforce Periodical*, Issue 3- January 2010; web published. <http://www.kcl.ac.uk/schools/sspp/interdisciplinary/scwru/pubs/periodical/issue3.html>

Hussein, S., Manthorpe, J. and Bakalana, A. (2009) *The Competing Demands for Women's Labour: the Role of Women in Long-Term Care Provision in the Russian Federation*. November 2009. Working paper prepared for the Russian Demographic Policy Note Team, The World Bank, Washington D.C, Web published by Social Care Workforce Research Unit, King's College London. <http://www.kcl.ac.uk/content/1/c6/06/47/16/CompetingDemandsforWomenLabour-FinalNov09.pdf>

Hussein, S., Stevens, M. and Manthorpe, J. (2010) *International Social Care Workers in England: Profile, Motivations, experiences and Future Expectations*, February 2010. Final Report to the Department of Health, Social Care Workforce Research Unit, King's College London. <http://www.kcl.ac.uk/schools/sspp/interdisciplinary/scwru/research/projects/intl.html>

Li, L. (2005) Longitudinal changes in the amount of informal care among publicly paid home care recipients. *The Gerontologist*, 45, 4, 465-73.

Litwin, H. and Attias-Donfut, C. (2009) The inter-relationship between formal and informal care: a study in France and Israel. *Ageing and Society*. 29:71-91.

Miller, E., Allen, S. and Mor, V. (2009) Commentary: navigating the labyrinth of long-term care: shoring up informal caregiving in a home- and community-based world. *Journal of Aging and Social Policy*. 21(1):1-16.

Pickard, L., Wittenberg, R., Comas-Herrera, A., Davies, B. and Darton, R. (2000) Relying on informal care in the new century? Informal care for elderly people in England to 2031. *Ageing and Society*, 20:745-772.

Pinfold, V., Huxley, P., Tomlin, A. and Rapaport, J. (2010) *The development of an online training resource for mental health professionals to involve carers in information sharing*. A report for the National Institute for Health Research Service Delivery and Organisation Programme (SDO project 08/1711/160).

Rosenthal, C., Martin-Matthews, A. and Keefe, J. (2007) Care management and care provision for older relatives amongst employed informal care-givers. *Ageing and Society*, 27:755-778.

Simonazzi, A. (2009) Care regimes and national employment models. *Cambridge Journal of Economics*, 33:211-232.